





QUALIFICATION FILE

VERMI COMPOSTER, V2

√ Short Term Training (STT) □ Long Term Training (LTT) □ Apprenticeship
□ Upskilling □ Dual/Flexi Qualification √ For ToT √ For ToA
√General □ Multi-skill (MS) □ Cross Sectoral (CS) □ Future Skills □ OEM
NCrF/NSQF Level: 3
Submitted By: West Bengal State Council of Technical & Vocational Education and Skill Development

Submitting Body Name> West Bengal State Council of Technical & Vocational Education and Skill Development, Karigari Bhavan (5th Floor), Plot-B/7,

Action Area-III

New Town, Kolkata-700160

Submitting Body Contact Details:

Position in the organization: Chief Administrative Officer

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Contents

Section 1: Basic Details	3
2. Organic Grower (L-4)	4
Section 2: Module Summary	6
NOS/s of Qualifications	
Mandatory NOS/s:	6
Elective NOS/s: NA	7
Elective NOS/s: NA Optional NOS/s: NA	7
Assessment - Minimum Qualifying Percentage	7
Section 3: Training Related	7
Section 4: Assessment Related	8
Section 5: Evidence of the need for the Qualification	9
Section 6: Annexure & Supporting Documents Check List	
Annexure 1: Evidence of Level	10
Annexure 2: Tools and Equipment (Lab Set-Up)	12
Annexure 3: Industry Validations Summary	21
Annexure 4: Training & Employment Details	
Annexure 5: Blended Learning	22
Annexure 6: Detailed Assessment Criteria	23
Annexure 7: Assessment Strategy	24
Annexure 8: Acronym and Glossary	25

Section 1: Basic Details

1.	Qualification Name		ii Composter,V2						
		STC -	AGR/NSQF-2022/0234,V2						
2.	Sector/s	Agric	ulture						
3.	Type of Qualification: ☐ New ☐√ Revised	NQR (Code & version of existing/previous		Qualification Nam	e of existing/previous version:			
	☐ Has Electives/Options		ication: (change to previous, once app	oved)	/ed)				
	□OEM	STC -	AGR/NSQF-2018/804,		Vermi Composter				
4.	a. OEM Name	NA							
	b. Qualification Name (Wherever applicable)								
5.	National Qualification Register (NQR) Code	QG-03	3-AG-00366-2023-V2-WBSC	evel: 3					
	&Version	Version	on 2.0						
	(Will be issued after NSQC approval)								
7.	Award (Certificate/Diploma/Advance Diploma/	Certifi	cate						
	Any Other (Wherever applicable specify multiple								
	entry/exits also & provide details in annexure)								
8.	Brief Description of the Qualification		1 1			or she produces compost through aerobic			
			organisms. A Vermi-composter analyses	the nu	atrition value of compost	t to retain the fertility in the soil.			
9.	Eligibility Criteria for Entry for	Entry Qualification & Relevant Experience:							
	Student/Trainee/Learner/Employee								
		S. No.	Academic/Skill Qualification (with Specialization - if applicable)		ired Experience (with Specialization - if applicable)				
		1	Grade 10	Nil					
		2	Grade 8 pass and pursuing	Nil					
			continuous schooling in regular						
			school with vocational subject						
		3	Grade 8 Pass	2 yrs					
			drade or ass	<i>-</i> y.0					
		4	5th Grade Pass	5 yrs					

10	Credits Assigned to this Qualification, Subject	12			11. Co	ommon Cost Nori	n Category	(I/II/III) (wherever	
	to Assessment (as per National Credit				ар	plicable):			
	Framework (NCrF))				NA				
12	Any Licensing requirements for Undertaking	NA			'				
	Training on This Qualification (wherever								
	applicable)								
13	Training Duration by Modes of Training	√□Offline □Online	□Blended						
	Delivery (Specify Total Duration as per selected	Training Delivery	Theory	Practical	OJT	OJT	Total]	
	training delivery modes and as per requirement of	Modes	(Hours)	(Hours)	Mandatory	Recommende	(Hours)		
	the qualification)		, ,	,	(Hours)	d (Hours)	,		
	and quamication,	Classroom (offline)	120	120	120		360		
		Online							
		(Refer Blended Learnin	g Annexure	or details)				•	
14	Aligned to NCO/ISCO Code/s (if no code is	6111.0100	6111.0100						
	available mention the same)								
15	Progression path after attaining the	Horizontal Progression:							
	qualification (Please show Professional and	1. Mushroom-Cultivat	or (L-3)						
	Academic progression)	2. Bio Gas and Bio slu		an (L-3)					
		Vertical Progression							
		1. Vermicompost Pro	oducer (L-4)						
		2. Organic Grower (I	4)						
16	Other Indian languages in which the	NA							
	Qualification & Model Curriculum are being								
	submitted								
17	Is similar Qualification(s) available on NQR-if	☐ Yes √☐ No URLs	of similar Q	ualifications:					
	yes, justification for this qualification								
18	Is the Job Role Amenable to Persons with	□ Yes √□ No							
	Disability	If "Yes", specify appli	cable type o	f Disability:					
19	How Participation of Women will be	Women as part of self	-help group	s take part in	this training	and then go for s	self-employ	ment as well as wage	
	Encouraged	employment							
20	Are Greening/ Environment Sustainability	□ Yes √ No							
	Aspects Covered (Specify the NOS/Module								
	which covers it)								
21	Is Qualification Suitable to be Offered in	Schools √ Yes □ No	o Colleges	S ⊠ Yes □ N	No				
	Schools/Colleges								

22	Name and Contact Details of Submitting /	ting / Name: Saequa Monazza, Chief Administrative Officer						
	Awarding Body SPOC	Email: caowbsctvesd@gmail.com		Contact No.:				
	(In case of CS or MS, provide details of both Lead	033-2340-3717						
	AB & Supporting ABs)	Website: sctvesd.wb.gov.in						
23	Final Approval Date by NSQC: 3.5.2023	24. Validity Duration: 3 years	25. Next Review Date 3.5.2026					

Section 2: Module Summary

NOS/s of Qualifications Mandatory NOS/s:

Th.-Theory Pr.-Practical OJT-On the Job Man.-Mandatory Training Rec.-Recommended Proj.-Project

S.	NOS/Module Name	NOS/Module	Core/	NCrF/	Credits	Т	rainir	g Durati	ion (Hou	rs)			Asses	sment N	/larks	
No		Code & Version (if applicable)	Non- Core	NSQF Level	•	Th.	Pr.	OJT- Man.	OJT- Rec.	Tota I	Th.	Pr.	Proj.	Viva	Total	Weight age (%) (if applicab le)
1.	Identify the species of earthworm capable for producing vermi compost from agriculture waste.	AGR/0234/OC1 ,V2.0	Core	3	1	10	20			30	24	60			84	8.4%
2.	Construct the compost pit and bed with Pit method.	AGR/0234/OC2 ,V2.0	Core	3	1	10	20			30	24	60			84	8.4%
3.	Prepare vermin and other compost.	AGR/0234/OC3 ,V2.0	Core	3	1	10	20			30	26	60			86	8.6%
4.	Collect the vermi wash, analyse the composition and apply to the field	AGR/0234/OC4 ,V2.0	Core	3	1	10	20			30	24	60			84	8.4%
5.	Pack vermi compost and other compost for transportation	AGR/0234/OC5 ,V2.0	Core	3	1	10	20			30	24	60			84	8.4%
6.	Apply the compost fertilizer in agricultural field according to the composition of the soil.	AGR/0234/OC6 ,V2.0	Core	3	1	10	20			30	28	60			88	8.8%
7.	Work in real job situation with special emphasis on basic safety and hazards in this domain.	AGR/0234/OC7 ,V2.0	Core	3	4	0	0	120		120	0	0	440		440	44%
8.	Employability Skills- 60 hrs.	DGT/VSQ/N010 2	Core	3	2	60	0			60	50	0			50	5%
Dura	ation (in Hours) / Total Marks				12	120	120	120		360	200	360	440		1000	

Elective NOS/s: NA

S. No	NOS/Module Name	NOS/Module	Core/	NCrF/NSQF	Credits	T	Training Duration (Hours)			Assessment Marks						
		Code &	Non-	Level	as per	Th.	Pr.	OJT-	OJT-	Total	Th.	Pr.	Proj.	Viva	Total	Weightage
		Version (if	Core		NCrF			Man.	Rec.							(%) (if
		applicable)														applicable)
1.																
2.																
Duration	on (in Hours) / Total Marks															

Optional NOS/s: NA

S. No	NOS/Module Name	NOS/Module	Core/	NCrF/NSQF	Credits	Training Duration (Hours)			Assessment Marks							
		Code &	Non-	Level	as per	Th.	Pr.	OJT-	OJT-	Total	Th.	Pr.	Proj.	Viva	Total	Weightage
		Version (if	Core		NCrF			Man.	Rec.							(%) (if
		applicable)														applicable)
1.																
2.																
Duratio	on (in Hours) / Total Marks															

Assessment - Minimum Qualifying Percentage

Please specify any one of the following:

Minimum Pass Percentage – Aggregate at qualification level: <u>Th. 60% & Pr70</u>% (Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)

Minimum Pass Percentage – NOS/Module-wise: NA _____% (Every Trainee should score specified minimum passing percentage in each mandatory and selected elective NOS/Module to successfully clear the assessment.)

Section 3: Training Related

1.	Trainer's Qualification and experience in the	CTS/ATS (Horticulture) 5 years' experience
	relevant sector (in years) (as per NCVET	OR
	guidelines)	B.sc (Agriculture) 3 years' experience
	,	OR
		M.Sc ((Agriculture) 2 years' experience
		OR
		B.Com (Commerce) 3 years' experience
		AND
		Certified for Job Role: "Vermi Composter" mapped to QP: STC - AGR/NSQF-2022/0234". Minimum accepted
		score is 80%.
		Recommended that the Trainer is certified for the Job Role: "Trainer (VET and Skills)", mapped to the
		Qualification Pack: "MEP/Q2601, v2.0". Minimum accepted score is 80%

2.	Master Trainer's Qualification and experience	CTS/ATS (Horticulture) 5 years' experience
	in the relevant sector (in years) (as per NCVET	OR
	guidelines)	B.sc (Agriculture) 3 years' experience
	,	OR
		M.Sc ((Agriculture) 2 years' experience
		OR
		B.Com (Commerce) 3 years' experience
		AND
		Certified for Job Role: "Vermi Composter" mapped to QP: STC - AGR/NSQF-2022/0234".Minimum accepted
		score is 80%.
		AND
		Certified on any domain skill of NSQF Level 5 with experience in training activities in similar field.
3.	Tools and Equipment Required for Training	√□Yes □No (If "Yes", details to be provided in Annexure)
4.	In Case of Revised Qualification, Details of Any	NO
	Upskilling Required for Trainer	

Section 4: Assessment Related

1.	Assessor's Qualification and	CTS/ATS (Horticulture) 5 years' experience
	experience in relevant sector (in	OR
	years) (as per NCVET guidelines)	B.sc (Agriculture) 3 years' experience
	, con c, (ac p co o c = c g a ac ac ac c)	OR
		M.Sc ((Agriculture) 2 years' experience
		OR
		B.Com (Commerce) 3 years' experience
		AND
		Certified for Job Role: "Vermi Composter" mapped to QP: STC - AGR/NSQF-2022/0234".Minimum
		accepted score is 80%.
		Recommended that the Assessor is certified for the Job Role: "Assessor (VET and Skills)", mapped
		to the Qualification Pack: "MEP/Q2701, v2.0". Minimum accepted score is 80%
2.	Proctor's Qualification and	CTS/ATS (Horticulture) 5 years' experience
	experience in relevant sector (in	OR
	years) (as per NCVET guidelines)	B.sc (Agriculture) 3 years' experience
	, , ,	OR
		M.Sc ((Agriculture) 2 years' experience
		OR
		B.Com (Commerce) 3 years' experience
3.	Lead Assessor's/Proctor's	CTS/ATS (Horticulture) 5 years' experience
	Qualification and experience in	OR
L	·	

	relevant sector (in years) (as per	B.sc (Agriculture) 3 years' experience
	NCVET guidelines)	OR
	,	M.Sc ((Agriculture) 2 years' experience
		OR
		B.Com (Commerce) 3 years' experience
4.	Assessment Mode (Specify the	Offline
	assessment mode)	
5.	Tools and Equipment Required for	Same as for training □√ Yes □ No (details to be provided in Annexure-if it is different for line).
	Assessment	Assessment)

Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

1.	Latest Skill Gap Study (not older than 2 years) (Yes/No): No
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): NO
3.	Government /Industry initiatives/ requirement (Yes/No): No
4.	Number of Industry validation provided: 3
5.	Estimated nos. of persons to be trained and employed: 1200 per year
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: Yes
	If "No", why:

Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1.	Annexure: NCrF/NSQF level justification based on NCrF level/NSQF descriptors (Mandatory)	Annexure 1
2.	Annexure: List of tools and equipment relevant for qualification (Mandatory, except in case of online course)	Annexure 2
3.	Annexure: Detailed Assessment Criteria (Mandatory)	Annexure 6
4.	Annexure: Assessment Strategy (Mandatory)	Annexure 7
5.	Annexure: Blended Learning (Mandatory, in case selected Mode of delivery is "Blended	NA

	Learning")	
6.	Annexure: Multiple Entry-Exit Details	NA
	(Mandatory, in case qualification has multiple	
	Entry-Exit)	
7.	Annexure: Acronym and Glossary (Optional)	Annexure 8
8.	Supporting Document: Model Curriculum	Yes
	(Mandatory – Public view)	
9.	Supporting Document: Career Progression	Yes in Q file
	(Mandatory - Public view)	
10.	Supporting Document: Occupational Map	Yes in Q File
	(Mandatory)	
11.	Supporting Document: Assessment SOP	Yes in Model Curriculum
	(Mandatory)	
12.	Any other document you wish to submit:	NO

Annexure 1: Evidence of Level

NCrF/NSQF Level Descriptors	Key requirements of the job role/ outcome of the	How the job role/ outcomes relate to the NCrF/NSQF level	NCrF/NSQF
	qualification	descriptor	Level
Professional Theoretical Knowledge/Process	Prepare vermiculture with earthworm and construct bed for Vermicomposting with specific measurement	 User/individual on the job needs to know and understand: Plan and organize work of vermiculture and vermicomposting and analyze analyse the components of compost. Basic concepts of related to work productivity including waste reduction, efficient material usage and optimization of time. 	3
Professional and Technical Skills/ Expertise/ Professional Knowledge	 Explain and Demonstrate Professional Knowledge include vermicomposting method, compost collection and packaging, application of compost in agricultural field. 	hod, of basic principles and knowledge about the	
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	 Record expenses incurred during construction and procurement of materials. Document work related activities in appropriate work-sheet, register, etc. on 	 User/ Individual demonstrate the practical skill about vermicomposting and their application range in agricultural field. 	3

	number of beds, stage of work completed, dimensional and quantitative details of bed preparations, quantity of worms, stage of work completed, volume of feeds, watering duration, temperature monitoring etc. • Record details of work related problems/observations and maintain pit of corrective measures. • Record expenses incurred during maintenance of unit and procurement of earthworms. • Record details of work related problems/observations and maintain track of corrective measures.		
Broad Learning Outcomes/Core Skill	 Communicate effectively Fundamental knowledge of computer and basic understanding personal banking 	 User / Individual gathers knowledge of soft skill and fundamental knowledge of computer which enable the user/ individual to work in a team in a collaborative manner. 	3
Responsibility	 Check-up procedures to ensure that project objectives are finished within specified time frames are developed. Read and interpret warnings/instructions given on tools and materials such as chemical fertilizer or insecticide. Read circulars/notifications issued by appropriate authority or concerned agency on information related to work. 	User / Individual is required to carry out functions such as interpreting warnings/instructions given on tools and materials needed in vermicomposting. In these activities user / individual is doing the task under supervision.	3

Annexure 2: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment **Batch Size:** 30

SI.	Items Name	Specification	Quantity
No		·	·
1.	Shovel,	Shovel,	8
2.	Spade (kodali),	Spade (kodali),	6
3.	Crowbars,	Crowbars,	8
4.	Iron baskets	Iron baskets	8
5.	Dung fork,	Dung fork,	8
6.	Buckets,	Buckets,	8
7.	Bamboo baskets,	Bamboo baskets,	12
8.	Trowel	Trowel	8
9.	Water distribution pump	Water distribution pump with Plumbing and fitting tools	2 sets
10.	Power operated shredder	Power operated shredder	1
11.	Sieving machine with 3 wire	Sieving machine with 3 wire mesh sieves- 0.6 m x 0.9 m size - power	1
	mesh sieves-	operated with motor	
12.	Weighing scale (100 kg	Weighing scale (100 kg capacity)	2
	capacity)		
13.	Weighing machine (platform	Weighing machine (platform type)	2
	type)		
14.	Bag sealing machine	Bag sealing machine	2
15.	Culture trays (plastic) (35 cm x	Culture trays (plastic) (35 cm x 45 cm)	15
	45 cm)		
16.	Wheel barrows -	Wheel barrows -	3
17.	Kodal (long size)	Kodal (long size)	6
18.	Water spraying machine	Water spraying machine	4
19.	Pump set	Pump set 1hp	2
20.	Drum(plastic)	Drum(plastic)	6
21.	Gumla big size	Gumla big size	8
22.	Finger type Kodal (long size)	Finger type Kodal (long size)	4
23.	Hand type Belcha	Hand type Belcha	6
24.	Iron sieve	Iron sieve	6
25.	Black polythene sheet 20 inch	Black polythene sheet 20 inch ×15 inch	10

SI. No	Items Name	Specification	Quantity
110	×15 inch		
26.	Jute bag long size	Jute bag long size	10
27.	Fork Hoe (Nirani)	Fork Hoe (Nirani)	8
28.	Archara (hand type iron made wire net)	Archara (hand type iron made wire net)	12
29.	Plastic bag 10Kg capacity	Plastic bag 10Kg capacity	30
30.	Hot air oven (24"×24"×24") with blower	Hot air oven (24"×24"×24") with blower digital temp(Multispan) and time control, inside made of 304SS of 20gage, out side of MS with powder coated finish, ball catcher heavy door. Three side heating elements, Standard double wall febrication, Inner chamber made of highly polished stainless steel sheet, Exterior fabricated out of thick mild steel duly finished in white stoving enamel with mat finished colour combinations, Quick and uniform heating in range of 50°C to 250°C ±2°C controlled by capillary type thermostat, L-shaped thermometer is built-in type, Control panel is provided with selector switch of high or low rates of power thermostat control knob and indicators for mains & thermostat,	1
31.	Kjheldhal distillation unit 500ml capacity.	Kjheldhal distillation unit 500ml capacity provided with condenser rack, stand, clamp, six test heater type. Kjheldhal flask 500ml & 1.5ft condensers, connector, adaptor, dropper funnel with stop cock of proper size (borosil), all have standard joint B24/B29 and rubber tube needed for water connection and water discharge through condensers. Each heater made by high quality nicrom wire with cotton cover and thermostat controlled arrangement.	1
32.	Kjheldhal digestion unit, lab std 500ml cap.	Kjheldhal digester Kjheldhal digestion unit, lab std 500ml cap. six test heater type with Kjheldhal flask 500ml(borosil) and supporting stand and clamp. Each heater made by high quality nicrom wire and thermostat controlled arrangement.	1
33.	Rectangular hot plate of, (10"×16"×9")	Rectangular hot plate of, (10"×16"×9") 304SS top of 10 gauge/fully SS body of 18 gauge, digital temperature indicator cum controller in one side.	1
34.	Digital pH Meter,	Digital pH Meter, Range: 0 to 14pH (mV upto 1999mV), Resolution: 0.01pH (±1mV), Accuracy: 0.01pH, ±1 digit (1mV, •±1digit),	2

SI.	Items Name	Specification	Quantity
No		Temperature compensation: 0°C to 100°C (manual), 4 digit LED display with automatic polarity and decimal indications, With one combination electrode, stand, clamp, buffers, dust cover & manual. Supply with pH 4.01 buffer, pH	
		7.00 buffer pH 10.01 buffer	
35.	High precision balance Capacity=1000gm	High precision balance Capacity=1000gm Readability=0.001 SS Pan size (mm) = 128×128	1
36.	High precision balance Capacity=6100gm	High precision balance Capacity=6100gm Readability=0.01 SS Pan size (mm) = 165×165	1
37.	Digital electronics balance ,capacity 0.1mg- 120gm,	Digital electronics balance ,capacity 0.1mg-120gm, accuracy 0.0001gm, pan dia 80mm	1
38.	Digital electronics balance, capacity: 5mg-210gm,	Digital electronics balance, capacity : 5mg-210gm, accuracy 0.001gm, SS pan	1
40.	Physical rough balance Capacity=50Kg Readability= 1gm SS Pan size (mm) = 250×330	Physical rough balance Capacity=50Kg Readability= 1gm SS Pan size (mm) = 250×330	2
41.	Magnetic Starrer, with Hot Plate,	Magnetic Starrer, with Hot Plate, with Stepless Speed control &S.S. body and top. Stirring capacity 5lt liquid. It utilises magnetic filed created by a Heavy duty permanent magnet which induces variable speed stirring action. Stirring is accomplished by means of small teflon rotor, which when placed to be stirred is capable or rotation by magnetic field applied from below the container. Fitted with pilot lamp.	1
42.	Thermometer,0degC to 100 deg C glass	Thermometer,0degC to 100 deg C glass	4
43.	Horizontal mechanical rotary shaker, 250mlx24 flask ,	Horizontal mechanical rotary shaker, 250mlx24 flask, with 304 SS of 20 gauge shaking plate and flask holder made of SS ring in round shape, digital rpm display controller.	1
44.	Muffle furnce, size of inner chamber (5"x 5"x 10")inch,	Muffle furnce, size of inner chamber (5"x 5"x 10")inch, for 1000°C working, outer casing made of heavy duty M.S. materials and sheet	1

SI.	Items Name	Specification	Quantity
No			
		duly painted finished, heating elements are better quality.	
		For 1000°C working 3.0KW.	
45.	Soxhlet apparatus with six	Soxhlet apparatus with six chamber mantle type,flask capacity 250ml, 2	1
	chamber mantle type,flask	vertical,2 horizontal rods with adaptor and screw to hold flask ,six test	
	capacity 250ml,	heater of high quality nicrom wire with cotton cover including soxhlet	
		apparatus glass parts, RB flask of 250ml, extractor, condenser, silicon	
4.0	Canalasiaalataa batb	tube.	1
46.	Serological water bath,	Serological water bath, Double wall insulation, total 304SS of 20gauge(1
		inner and outer), capacity (12x250ml) (16"×12"×10") 304SS lid, Ambient	
47.	centrifuge,	to 110 °C and digital temperature indicator. one outlet with ball valve centrifuge, maximum rotating speed limit 5250 rpm with angle rotor	1
47.	centinuge,	head 15ml × 16 capacity	1
48.	Concentric ring water bath,	Concentric ring water bath, Double wall insulation, total 304SS of	1
40.	Concentric ring water batti,	20gauge(inner and outer),, capacity of 12 holes(16"×12"×6"), digital	1
		temperature controller, one outlet with ball valve.	
49.	Scanning visible Spectro	Scanning visible Spectro Photo Meter Wavelength	1
	Photo Meter Wavelength	340-990nm	-
	340- 990nm	Detector= silicon photo diode	
	Detector= silicon photo diode		
50.	Digital Turbidity meter	Digital Turbidity meter	1
		Range = 0-1NTU, 0-10NTU,0-100NTU,0-1000NTU	
		accuracy ; ±2% of F.S in 0-1 & 0-1000NTU,	
		±1% of F.S in 0-10 & 0-100NTU	
51.	Water Spraying Machine	Water Spraying Machine 10Lt Capacity	2
52.	Digital flame photometer	Digital flame photometer, Specification:	1
		Range:	
		Element Channel Low Medium High Na 1	
		100ppm 10ppm 1ppm K	
		2 100ppm 10ppm 1ppm Ca	
		1 15ppm	
		Li 2 10ppm	
		Nebulizer : concentric suction type with stainless steel capillary:	
		Flame system:	
		Burner: Stainless steel Fuel gas: LPG	

SI.	Items Name	Specification	Quantity
No			
		Oxidant: Dry oil free air	
		Regulator: Stainless steel needle type Detector:	
		Photodiode	
		Readout: 21\2 digit 7 segment LED display of 12.7 mm height with	
		polarity indication.	
53.	Test tube,borosilicate glass 18x15 ml	Test tube ,borosilicate glass 18x15 ml Heat Resistant, Annealing Surface	50
54.	Test tube,borosilicate glass 15x15 ml	Test tube ,borosilicate glass 15x15 ml Heat Resistant, Annealing Surface	50
55.	Beaker, graduated , borosilicate glass 1000ml	Beaker, graduated, borosilicate glass 1000ml Heat Resistant, Annealing Surface	5
56.	Beaker, graduated,	Beaker, graduated, borosilicate glass 500ml Heat Resistant, Annealing	5
	borosilicate glass 500ml	Surface	•
57.	Beaker, graduated ,	Beaker, graduated, borosilicate glass 250ml Heat	10
	borosilicate glass 250ml	Resistant, Annealing Surface	
58.	Beaker, graduated ,	Beaker, graduated, borosilicate glass 100ml Heat Resistant, Annealing	10
	borosilicate glass 100ml	Surface	
59.	Conical flask, graduated,	Conical flask, graduated , borosilicate glass 500ml Heat Resistant,	5
	borosilicate glass 500ml	Annealing Surface	
60.	Conical flask, graduated ,	Conical flask, graduated , borosilicate glass 250ml Heat Resistant,	10
	borosilicate glass 250ml	Annealing Surface	
61.	Conical flask, graduated,	Conical flask, graduated , borosilicate glass 100ml Heat Resistant,	10
	borosilicate glass 100ml	Annealing Surface	
62.	Pipette, graduated ,	Pipette, graduated , borosilicate glass 50ml Heat Resistant, Annealing	5
	borosilicate glass 50ml	Surface	
63.	Pipette, graduated ,	Pipette, graduated , borosilicate glass 25ml Heat Resistant, Annealing	5
	borosilicate glass 25ml	Surface	
64.	Pipette, graduated ,	Pipette, graduated , borosilicate glass 10ml Heat Resistant, Annealing	5
	borosilicate glass 10ml	Surface	
65.	Pipette, graduated ,	Pipette, graduated, borosilicate glass 5ml Heat Resistant, Annealing	5
	borosilicate glass 5ml	Surface	
66.	Pipette, graduated ,	Pipette, graduated, borosilicate glass 2ml Heat Resistant, Annealing	5
	borosilicate glass 2ml	Surface	
67.	Pipette, graduated ,	Pipette, graduated, borosilicate glass1ml Heat Resistant, Annealing	5

SI.	Items Name	Specification	Quantity
No	borosilicate glass1ml	Surface	
68.	Burette 50ml , graduated , borosilicate glass (with ptfe stoppered),	Burette 50ml , graduated , borosilicate glass Heat Resistant, Annealing Surface (with ptfe stoppered),	6
69.	Volumetric flask, graduated, borosilicate glass 1000ml	Volumetric flask, graduated , borosilicate glass 1000ml Heat Resistant, Annealing Surface	6
70.	Volumetric flask ,graduated , borosilicate glass 500ml	Volumetric flask ,graduated , borosilicate glass 500ml Heat Resistant, Annealing Surface	5
71.	Volumetric flask ,graduated , borosilicate glass 250 ml	Volumetric flask ,graduated , borosilicate glass 250ml Heat Resistant, Annealing Surface	10
72.	Volumetric flask ,graduated , borosilicate glass 100ml	Volumetric flask ,graduated , borosilicate glass 100ml Heat Resistant, Annealing Surface	10
73.	Measuring cylinder, graduated , borosilicate glass 1000ml	Measuring cylinder, graduated , borosilicate glass 1000ml Heat Resistant, Annealing Surface	5
74.	Measuring cylinder ,graduated , borosilicate glass 500ml	Measuring cylinder ,graduated , borosilicate glass 500ml Heat Resistant, Annealing Surface	5
75.	Measuring cylinder ,graduated , borosilicate glass 250ml	Measuring cylinder ,graduated , borosilicate glass 250ml Heat Resistant, Annealing Surface	5
76.	Measuring cylinder ,graduated , borosilicate glass 100ml	Measuring cylinder ,graduated , borosilicate glass 100ml Heat Resistant, Annealing Surface	5
77.	Measuring cylinder ,graduated , borosilicate glass 50ml	Measuring cylinder ,graduated , borosilicate glass 50ml Heat Resistant, Annealing Surface	5
78.	Measuring cylinder ,graduated , borosilicate glass 25ml	Measuring cylinder ,graduated , borosilicate glass 25ml Heat Resistant, Annealing Surface	5

SI.	Items Name	Specification	Quantity
No	NAinin-d	Managering sulinder graduated hornsilisate place 10ml Heat Desistant	
79.	Measuring cylinder	Measuring cylinder ,graduated , borosilicate glass 10ml Heat Resistant, Annealing Surface	5
	,graduated , borosilicate glass 10ml		
80.	Funnel 60 deg angle long stem	Funnel 60 deg angle long stem , borosilicate glass 75mm Heat Resistant,	10
	, borosilicate glass 75mm	Annealing Surface	
81.	Glass rod 150 mm long, 5-6	Glass rod 150 mm long, 5-6 mm dia borosilicate glass Heat Resistant,	20
	mm dia borosilicate glass	Annealing Surface	
82.	Porcelain basin 100 mm dia	Porcelain basin 100 mm dia Heat Resistant,	6
83.	Mortar/ pestle(porcelain) 100 mm	Mortar/ pestle(porcelain) 100 mm	3
84.	Reagent bottle, borosilicate	Reagent bottle, borosilicate glass 250ml Heat Resistant, Annealing	10
	glass 250ml	Surface	
85.	Reagent bottle, borosilicate	Reagent bottle, borosilicate glass 500ml Heat Resistant, Annealing	10
	glass 500ml	Surface	
88.	Beaker, (Plastic)graduated,	Beaker, (Plastic)graduated, 1000ml	10
	1000ml		
89.	Beaker, (Plastic)graduated,	Beaker, (Plastic)graduated, 500ml	10
	500ml		
90.	Beaker, (Plastic)graduated,	Beaker, (Plastic)graduated, 250ml	10
	250ml		
91.	Beaker,	Beaker, (Plastic)graduated, 100ml	10
	(Plastic)graduated, 100ml		
92.	Beaker, (Plastic)graduated,	Beaker, (Plastic)graduated, 50ml	10
	50ml		
93.	Plastic bucket, 5lit	Plastic bucket, 5lit, heavy gauge nylon made	2
94.	Plastic bucket, 9lit	Plastic bucket, 9lit, heavy gauge nylon made	2
95.	Plastic bucket, 15lit	Plastic bucket, 15lit, heavy gauge nylon made	2
96.	Tray ,plastic, (12''×10'')	Tray ,plastic, (12"×10"), heavy gauge nylon made	6
97.	Tray ,plastic, (17''×12'')	Tray ,plastic, (17"×12"), heavy gauge nylon made	6
98.	Tray ,plastic, (19''×13'')	Tray ,plastic, (19"×13"), heavy gauge nylon made	3
99.	Spoon Spatula	Spoon Spatula non-magnetic stainless steel with high polish one	6
		side spoon	
	6" long ,SS	, 6" long ,SS	
100.	Spoon Spatula	Spoon Spatula non-magnetic stainless steel with high polish one	6

SI.	Items Name	Specification	Quantity
No			
		side spoon	
	8" long ,SS	, 8" long ,SS	
101.	Plane Desiccators Dia	Desiccators Dia 300mm, plastic made	2
	300mm		
	, plastic made		
102.	Test tube holder (heavy)	Test tube holder (heavy)	10
103.	Burette stand with base and	Burette stand with base and double clamp, (plastic PP made)	6
	double clamp, (plastic PP		
101	made)		
104.	Burette stand with base and	Burette stand with base and single clamp, (plastic PP made)	6
105.	single clamp, (plastic PP made) Pipette stand (plastic PP	Dinette stand (plastic DD made) (Herizontal)	4
105.	made) (Horizontal)	Pipette stand (plastic PP made) (Horizontal)	4
106.	Pipette stand (plastic PP	Pipette stand (plastic PP made) (Vertical)	4
100.	made)	ripette stand (plastic Fr made) (vertical)	4
	(Vertical)		
107.	Burette stand with base and	Burette stand with base and single clamp, (plastic PP made)	6
	single clamp, (plastic PP made)	2 a. cate can a man a can a ca	·
108.	Test tube stand (plastic	Test tube stand (plastic PP made) Dia 20mm	6
	PP made) Dia	,	
	20mm		
109.	Test tube stand (plastic	Test tube stand (plastic PP made) Dia 25mm	6
	PP made) Dia		
	25mm		
110.	Wash bottle, (plastic), 500 ml	Wash bottle, (plastic), 500 ml	12
111.	Filter stand with base	Filter stand with base and double clamp, (plastic PP made)	6
	and double clamp, (plastic PP		
	made)		
112.	pH Paper	pH range 1 to 14	10
113.	pH Buffer capsule/tablet, 10	pH Buffer capsule/tablet, 10 caps in each pack,(pH 4, pH 7, pH 9.2)	3
	caps in each pack,(pH 4, pH 7,	Highly Pure, Analytical Grade	
	pH 9.2)		
114.	Sodium hydroxide	Sodium hydroxide pallet,500gm Highly Pure, Analytical Grade	1
	pallet,500gm		

SI.	Items Name	Specification	Quantity
No			
115.	Concentrated HClacid,1 lit	Concentrated HCl acid, 2.5 lit Highly Pure, Analytical Grade	1
116.	Potassium Nitrate,500gm	Potassium Nitrate,500gm Highly Pure, Analytical Grade	1
117.	Potassium di hydrogen phosphate,500gm	Potassium di hydrogen phosphate,500gm Highly Pure, Analytical Grade	1
118.	Di potassium hydrogen phosphate,500gm	Di potassium hydrogen phosphate,500gm Highly Pure, Analytical Grade	1
119.	Potassium chloride,500gm	Potassium chloride,500gm Highly Pure, Analytical Grade	1
120.	Sodium chloride,500gm	Sodium chloride,500gm Highly Pure, Analytical Grade	1
121.	Petrolium Ethar, 500ml (60°C- 80°C)	Petrolium Ethar, 500ml (60°C-80°C) Highly Pure, Analytical Grade	2
122.	Phenolphthalein indicator(1% solution), 125 ml	Phenolphthalein indicator(1% solution), 125 ml Highly Pure, Analytical Grade	2
123.	Ammonium molybdet,pure,100gm	Ammonium molybdet,pure,100gm Highly Pure, Analytical Grade	1
124.	Concentrated Sulphuric acid,1	Concentrated Sulphuric acid,1 lit Highly Pure, Analytical Grade	1
125.	Potassium di chromate,500gm	Potassium di chromate,500gm Highly Pure, Analytical Grade	1
126.	Sodium bicarbonate,500gm	Sodium bicarbonate,500gm Highly Pure, Analytical Grade	1
127.	Mercuric sulphate,25gm	Mercuric sulphate,25gm Highly Pure, Analytical Grade	1
128.	Silver nitrate,25 gm	Silver nitrate,25 gm Highly Pure, Analytical Grade	1
129.	Boric acid (Crystal)	Boric acid (Crystal) ,500 gm Highly Pure, Analytical Grade	1
	,500 gm		
130.	Sodium Nitrate,500gm	Sodium Nitrate,500gm Highly Pure, Analytical Grade	1

Classroom Aids

The aids required to conduct sessions in the classroom are:

- 1. White Board
- 2. White board writing pen
- 3. Projector
- 4. Computer

Annexure 3: Industry Validations Summary

Provide the summary information of all the industry validations in table. This is not required for OEM qualifications.

S.	Organization Name	Representativ	Designation	Contact	Conta	E-mail ID	LinkedIn Profile (if
N		e Name		Address	ct		available)
0					Phon		
					e No		
1.	Red Cow Dairy Pvt. Ltd	Bijan Bishnu	Asst. Manager	Nandan Housing	90730	Bishnubijanfp7007@gmail.c	
	_			Complex, Station	22965	om	
				Road, Hooghly			
2.	Krishna Chandra Dutta	Dr.Dipan	Food technology &		98305	dipanchatterjee@cookme.c	
	(Spice) Pvt Ltd	Chatterjee	quality control manager		65872	om	
		-					
3.	M/s Foodies Agro	Mr. Monoj	Proprictor	Beharampur,	97751	foodiesagro@rediffmail.co	
		Mishra		Murshidabad	86565	m	

Annexure 4: Training & Employment Details

Training and Employment Projections:

Year	Total Candidates			Women	People with Disability		
	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	
	Training #	Employment	Training #	Employment	Training #	Employment	
		Opportunities		Opportunities		Opportunities	
2023-	600	100% self	240	100% self			
24		employed		employed			

Training, Assessment, Certification, and Placement Data for previous versions of qualifications:

Qualification	Year	Total Candidates				Women			People with Disability				
Version		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed
1.0	2020-21	600	541	541	100%			147	100%				
					(self				(self				
					employed)				employed				
	2021-22	500	493	493	100%			136	100%				
					(self				(self				
					employed)				employed				

List Schemes in which the previous version of Qualification was implemented:

1. State Level Short Term Program under "Utkarsh Bangla" Scheme.

Content availability for previous versions of qualifications:

☐ Participant Handbook	☐ Facilitator Guide ☐ Digital Content	√□ Qualification Handbook □ Anv	Other

Languages in which Content is available: English

Annexure 5: Blended Learning

Blended Learning Estimated Ratio & Recommended Tools: NA

Refer NCVET "Guidelines for Blended Learning for Vocational Education, Training & Skilling" available on:

https://ncvet.gov.in/sites/default/files/Guidelines%20for%20Blended%20Learning%20for%20Vocational%20Education,%20Training%20&%20Skilling.pdf

S. No.	Select the Components of the Qualification	List Recommended Tools – for all Selected Components	Offline : Online Ratio
1	☐Theory/ Lectures - Imparting theoretical and conceptual knowledge	NA	NA
2	□Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	NA	NA
3	☐Showing Practical Demonstrations to the learners	NA	NA
4	□Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	NA	NA
5	□Tutorials/ Assignments/ Drill/ Practice	NA	NA
6	□Proctored Monitoring/ Assessment/ Evaluation/ Examinations	NA	NA
7	□On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	NA	NA

Annexure 6: Detailed Assessment Criteria

Detailed assessment criteria for each NOS/Module are as follows:

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	Identify the species of earthworm capable for producing vermi compost from	24	60		
	agriculture waste.				
	(1.1) Identify and select types of earthworm species.				
	(1.2) Illustrate the role of earthworm in soil.				
AGR/0234/OC1,V2.0	(1.3) Identify earthworm through morphological and physiological examination.				
	(1.4) Select the agriculture waste for producing vermi compost				
	(1.5) Prepare vermi compost by using commercial				
	Earthworms.				
	Total Marks	24	60		
	Construct the compost pit and bed with Pit method.	24	60		
	(2.1) Identify and select the location for preparation of compost pit.				
	(2.2) Select the raw materials required for compost pit				
	(2.3) Prepare the pit as per requirement and size.				
	(2.4) Follow the proper procedure for preparation of compost.				
AGR/0234/OC2,V2.0	(2.5) Practice on Pit method of vermicomposting.				
Adity 0234/ 002, V2.0	(2.6) Practice on Heap method of vermicomposting.				
	(2.7) Practice on Poly-vermi method.				
	(2.8) Practice on Hanging methods.				
	(2.9) Enumerating possible risks and hazards in the work environment				
	(2.10) Practising safety exercise.				
	Total Marks	24	60		
AGR/0234/OC3,V2.0	Prepare vermin and other compost.	24	60		
	(3.1) Identify the raw materials require for compost				
	(3.2) .Plan and select the size of the tank				
	(3.3) Collect the bio mass				
	(3.4) Prepare the bed for compost				
	(3.5) Put the raw materials require in the tank.				
	(3.6) Observe regularly and have a frequent check(3.7) Practice of breeding of earthworms in the tray and rack.				
_	(5.7) Fractice of breeding of earthworms in the tray and rack.				

	Total Marks	24	60		
	Collect the vermi wash, analyse the composition and apply to the field	24	60		
	(4.1) Set up the vermi wash procedure				
	(4.2) Set up the collection device in proper place				
AGR/0234/OC4,V2.0	(4.3) Collet the vermi wash				
	(4.4) Identify the composition of vermi wash				
	(4.5) Recognize the role of vermi wash in crop production				
	Total Marks	24	60		
	Pack vermi compost and other compost for transportation	24	60		
A CD (022 A (0 CE) /2 0	(5.1) Identify the materials required for packaging of vermi compost.				
AGR/0234/OC5,V2.0	(5.2) Practice on packaging of vermi compost				
	(5.3) Practice for different weight of vermi compost for farmers and domestic users				
	Total Marks	24	60		
	Apply the compost fertilizer in agricultural field according to the composition of the soil.	28	60		
A OD 1000 A 10 OS VID O	(6.1) Identify the soil to be fertilized.				
AGR/0234/OC6,V2.0	(6.2) Identify and select the area of the field and crops				
	(6.3)Practice on application of bed wash in field by foliar spraying				
	(6.4) Practice on application of vermin wash in filed by foliar spraying				
	Total Marks	28	60		
	Work in real job situation with special emphasis on basic safety and hazards in this domain.	0	0	440	
AGR/0234/OC7,V2.0	(8.1) Assessor will check report prepared for this component of training of				
AGR/0234/OC7, V2.0	the course and assess whether competency has been developed to work in				
	the real job situation with special emphasis on basic safety and hazards in				
	this domain.				
	Total Marks	50	0	440	
DGT/VSQ/N0102, V1.0	Employability Skills- 60 hrs.	50	U		
DG1/V3Q/NO102, V1.0	As per model curriculum of NCVET Total Marks				
	Grand Total	200	360	440	

Annexure 7: Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program.

Mention the detailed assessment strategy in the provided template.

- <1. Assessment System Overview:
- Batches assigned to WBSCTVE&SD for conducting the assessment online through Portal with two probable dates for Assessment
- WBSCTVE&SD deploys the ToA certified Assessor for executing the assessment
- WBSCTVE&SD monitors the assessment process & records
- 2. Testing Environment:
- Check the Assessment location, date and time
- If the batch size is more than 30, then Assessment will spill over to consecutive days.
- Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.
- 3. Assessment Quality Assurance levels/Framework:
- Question bank is created by the Subject Matter Experts (SME) are verified by the other SME
- Questions are mapped to the specified assessment criteria
- Assessor must be ToA certified.
- 4. Types of evidence or evidence-gathering protocol:
 - · reporting of the assessor from assessment location
 - Centre photographs with signboards and scheme specific branding
- 5. Method of verification or validation:
- Surprise visit to the assessment location
- 6. Method for assessment documentation, archiving, and access
- · Hard copies of the documents are stored

On the Job:

- 1. Each module will be assessed separately.
- 2. The pass criteria is as per norms set by WBSCTVE&SD in respect of Qualification Files
- Tools of Assessment that will be used for assessing whether the candidate is having desired skills, understanding needs & requirements, and perform Soft Skills effectively:
 - Videos / portfolio of Trainees during OJT
- 4. Assessment of each Module will ensure that the candidate is able to:
- · Effective engagement with the stakeholders
- Understand the working of various tools and equipment
- Deliver the job assigned to him/her in conformity with job responsibility ascribed to Qualification File.

Annexure 8: Acronym and Glossary

Acronym

Acronym	Description	
AA	Assessment Agency	
AB	Awarding Body	

ISCO	International Standard Classification of Occupations
NCO	National Classification of Occupations
NCrF	National Credit Framework
NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework
OJT	On the Job Training

Glossary

Term	Description
National Occupational	NOS define the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual
Standards (NOS)	performing that task should know and also do.
Qualification	A formal outcome of an assessment and validation process which is obtained when a
	competent body determines that an individual has achieved learning outcomes to given standards
Qualification File	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The
	Qualification File will be normally submitted by the awarding body for the qualification.
Sector	A grouping of professional activities on the basis of their main economic function, product, service or technology.
Long Term Training	Long-term skilling means any vocational training program undertaken for a year and above. https://ncvet.gov.in/sites/default/files/NCVET.pdf